

## Exercise 8 page 130

1.1 What is your understanding of the term “safe sex”?

**Precautions taken by people to prevent any sexually transmitted diseases or pregnancy during sexual intercourse.**

1.2 Which contraceptive is used by men?

**Condoms**

1.3 Which precautions must be taken when the contraceptive in Question 1.2 is used?

**Before condoms are used, one has to make sure that the condom does not have any holes in it.**

**Air should be removed from the tip of the condom, to prevent it from bursting.**

**Condoms should not be used after the expiry date.**

1.4 Name two common myths about the prevention of pregnancy.

**Any two of the following:**

**You cannot get pregnant during your first sexual intercourse.**

**Pregnancy is impossible during the girl’s menstrual cycle.**

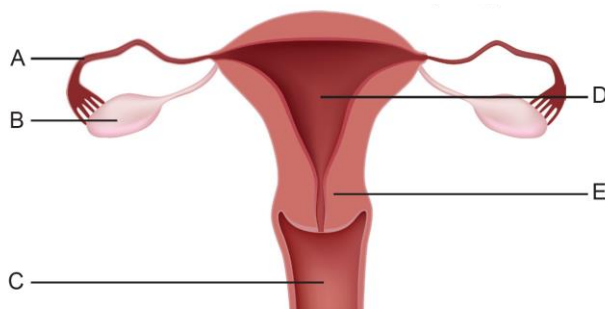
**Pregnancy can be prevented by bathing, sneezing continuously, or by jumping up and down after sexual intercourse.**

**Pregnancy can be prevented if the man pulls out his penis before ejaculation.**

**Pregnancy can be prevented if the couple has sex in the bath or Jacuzzi.**

**It is impossible to become pregnant if both parties do not reach orgasm.**

2 Study the sketch and answer the questions that follow:



2.1 Provide the following labels:

**A: Fallopian tube**

**B: Ovaries**

**C: Vagina**

2.2 Give a title for the sketch.

**The female reproductive system**

2.3 Which two female hormones are secreted by B?

**Oestrogen and progesterone**

2.4 What is D’s common name?

**Womb/uterus**

2.5 What is the function(s) of E?

**It supports the baby during pregnancy.**

**Serves as a gateway for sperm cells, menstrual blood and babies during birth.**

3 Name three negative influences that each of the following substances can have if it is used during pregnancy:

3.1 Drugs

**Any three of the following:**

**Miscarriages**

**Serious bleeding**

**Death of the baby**

**Child may develop breathing difficulties.**

**Poor development in babies**

**Learning disabilities later in the child's life**

**Babies may become addicted to drugs.**

3.2 Alcohol

**Foetal alcohol syndrome (FAS) which includes:**

- **poor growth before birth;**
- **facial deformity;**
- **reduced brain size;**
- **abnormal development.**

3.3 Cigarettes

**Babies with bronchitis, ear infections and colds**

**Babies with breathing problems**

**Cot death**

**Children with heart defects, brain damage and facial deformities**

**Children with asthma**

4. Draw a flow diagram to indicate the different phases in reproduction.

**Ovulation → copulation → ejaculation → fertilisation → pregnancy → cell division → birth**

5 Infertility is a common problem that affects thousands of people across the world.

Infertility occurs in both men and women.

5.1 Name three possible causes for a low sperm concentration/sperm count in men.

**Any three of the following:**

- **Overheating of the testes through hot baths, underwear that is too tight, laptops held on lap for too long or too often, etc.**
- **Weakening due to poor health, underfeeding, lack of exercise, too much smoking and alcohol.**
- **Stress and depression**
- **Congenital abnormalities; testes that do not descend before puberty; certain viral diseases like mumps; etc.**

5.2 Make four suggestions to prevent men from having a low sperm concentration/sperm count.

**Avoid tight-fitting underwear, rather wear loose-fitting underwear.**

**Avoid hot baths, rather use a shower.**

**Use your laptop on your lap as little as possible.**

**Follow a healthy lifestyle which includes a balanced diet and sufficient exercise.**

**Avoid smoking and too much alcohol.**

**(Any other appropriate suggestion)**

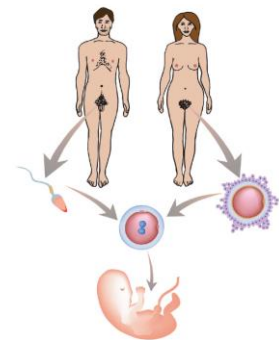
5.3 Name three possible causes of female infertility.

Any three of the following:

- **Ovulation does not take place due to a hormonal deficiency or due to emotional reasons like very high stress and anxiety.**
- **A shortage of hormones can prevent a fertilised ovum from attaching to the wall of the uterus.**
- **High stress can cause cramps in the Fallopian tubes and prevent an ovum from moving through it.**
- **Deformity of genitals; excessive acidity of the vagina paralyses sperm cells.**

6. Use the diagram to the right and give a simplified explanation of the different processes in human reproduction.

- **Ovulation:** An egg cell is released by the ovaries of a woman.
- **Copulation:** A man places his hardened penis in a woman's vagina.
- **Ejaculation:** Semen that contains sperm cells is released by the penis into the vagina.
- **Fertilisation:** A sperm cell and egg cell fuse and the zygote attaches to the wall of the uterus.
- **Cell division:** The zygote develops into a foetus b.m.o. cell division.
- **Birth:** After a period of 40 weeks, the baby is pushed out through the vagina.



7.1 Name two secondary sexual properties that can be observed in girls during puberty.

Any two of the following:

- **Increase in height**
- **Hips become wider and more round.**
- **Menstruation starts.**
- **Breasts enlarge.**
- **The uterus enlarges.**
- **Hair starts to grow under the arms and around the genitals.**

7.2 Which hormone causes the secondary sexual properties in girls during puberty?

**Oestrogen**

7.3 Name two secondary sexual properties that can be observed in boys during puberty.

Any two of the following:

- **Increase in height and becomes more muscular.**
- **Shoulders broaden.**
- **Voice breaks (voice becomes deeper).**
- **Genitals enlarge.**
- **Hair starts to grow on face, under the arms, around the genitals and sometimes on the chest, stomach and back.**

7.4 Which hormone causes the secondary sexual properties in boys during puberty?

**Testosterone**

7.5 Which gland in the brain controls the phase of puberty?

**Pituitary gland (hypophysis)**